



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/825,691	04/16/2004	Francois Baccelli	017346-0180	8855
22428	7590	08/21/2006	EXAMINER	
FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			NGUYEN, SIMON	
			ART UNIT	PAPER NUMBER
			2618	

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/825,691

Applicant(s)

BACCELLI ET AL.

Examiner

SIMON D. NGUYEN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 15-41 is/are rejected.
- 7) ☒ Claim(s) 8-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                   |                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                              | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 35 is objected to because of the following informalities: claim 35 is either dependent upon claim 26 or 33 since these claims included the term "predefined set of mobiles". It depends neither on claim 2 since claim 2 does not claim the term "scheme" nor it depends on claim 36 since claim 36 arranged after claim 35. Correction is required.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "taking into account the requirements of the mobile" is unclear. What is "requirement" Applicant mentioning about?

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2618

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1, 21-23, 25, 38-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Vanghi (2002/0155854).

Regarding claim 1, Vanghi discloses a communication network comprises a BSC, a plurality of BSs, and mobile stations (fig.1, abstract), wherein the network controls a down-link transmission power from the BSs to a given mobile station, comprising: computing the attenuation between the mobile and each base stations and the limit of the total power emitted by each base station (considered both as a first elementary quantity or initiate transmit power level set by the BSC in abstract of Vanghi) (paragraphs 10, 15, abstract); the product (an adjust power level after received a feedback command from the mobile station) of the first elementary quantity (initiate power level) by a second elementary quantity (a power control command received from the mobile station) taking into account the requirements of the mobile vis-à-vis its base stations and the attenuation between the mobile and its base station (paragraphs 16, 22-26, 28-39).

Regarding claim 25, this claim is rejected for the same reason as set forth in claim 1, wherein Vanghi further discloses a load calculator (paragraphs 35, 39).

Regarding claim 21-23, 38-40, Vanghi discloses computing the S/N ratio with a threshold between the mobile and the base station (paragraphs 4, 23, 30, 32-38), bit rate (paragraphs 42, 44, 46).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-7, 24, 26-33, 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanghi (2002/0155854).

Regarding claim 2, 26-28, Vanghi further disclose the BSC computing a load to a number of BSs in the active set of MS 102 (paragraphs 13, 27, 35). It should be noted that even though Vanghi does not specifically disclose as claimed but the teaching of Vanghi comprised the claimed steps (paragraphs 33-48) to know how much power needed in the network in order to handle the traffic load (paragraphs 10, 14, 52).

Regarding claims 3-6, 29-32, Vanghi further discloses the division of the limit on total power emitted by the nearby stations (paragraphs 12, 33) and the multiplication of the value between the serving station and the nearby station (22, 29, 39, 43, 45), summing all values of the base station on the mobile station with adding noise; computing the difference between the power emitted with a load threshold (paragraphs 30-46).

Regarding claims 7, 33, Vanghi further discloses the power control is adjusted based on data rates to satisfy the quality of signal (paragraph 9, 14, 15, 25-29, 47-49,

52). It should be noted that for adding a fixed data rate demand, the sum is inherently greater than the load threshold because the power in the network limit for traffic channel, if there are more traffic channel, the network inherently reduces a number of mobile stations in order to have enough power to handle the traffic.

Regarding claim 24, 41, Vanghi discloses the mobile station communicating a variable data rate, in which the network computes the total power transmitted based on the data rate (paragraphs 9, 14-15, 29, 47, 52).

8. Claims 15-18, 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanghi (2002/0155854) in view of Ishikawa et al. (2002/0107021).

Regarding claims 15-18, 34-35, Vanghi further discloses an access control to the base station associated with a data rate demand (paragraphs 9, 14, 15, 29, 47, 52), wherein the down link power control computation including a given mobile (paragraphs 13, 22, 55) and the data value is stored (paragraph 38). However, Vanghi does not specifically disclose an iterative of step for a new call.

Voyer discloses the iterative of computing the transmission power for a new call (paragraphs 69, 77, 86, 91, 96, 97, 103, 108). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Vanghi, modified by Voyer in order to prevent a disrupted call.

9. Claims 19-20, 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vanghi (2002/0155854) in view of Voyer (2001/0053670), and further in view of Ishikawa et al. (2002/0107021).

Regarding claims 19-20, 36-37, the modified Vanghi fails to teach rejecting a call.

Ishikawa discloses the network computes the transmission power of the network for a new call and if the power exceeds a threshold the call is rejected (paragraphs 42, 44, 45, 48, 52). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Vanghi, modified by Ishikawa in order to prevent the noise/interference may be caused by the low power transmission.

#### ***Allowable Subject Matter***

10. Claims 8-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 8, the prior art of record does not specifically disclose the sequence steps as claimed in case of the mobiles have a fixed data rate demand.

Regarding claim 9-14, these claims are objected as being dependent upon dependent claim that has been objected.

#### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. EliceGUI et al. (2004/0235510) discloses a communication

network comprises a BSC, a plurality of BSs, and mobile stations (fig.1, abstract), wherein the network controls a down-link transmission power from the BSs to a given mobile station, comprising: computing the attenuation between the mobile and each base stations and the limit of the total power emitted by each base station (considered both as a first elementary quantity (paragraphs 58, 65, 76, 84); the product (an adjust power level after received a feedback command from the mobile station) of the first elementary quantity (initiate power level) by a second elementary quantity (a power control command received from the mobile station) taking into account the requirements of the mobile vis-à-vis its base stations and the attenuation between the mobile and its base station (paragraphs 38, 48-65,81).

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks



Art Unit: 2618

600 Dulany, Alexandria, VA 22314

Or faxed to:

(571) 273-8300 (for formal communications intended for entry)

Hand-delivered response should be brought to Customer Service Window  
located at the Randolph Building, 401 Dulany, Alexandria, VA, 22314.

Simon Nguyen

August 10, 2006

A handwritten signature in black ink, appearing to read 'S. Nguyen', written in a cursive style.

**SIMON NGUYEN  
PRIMARY EXAMINER**